

NPBX Publications and Presentations

• Journal Publications

- Son, G. and Dhir V.K., “Numerical simulation of nucleate boiling on a horizontal surface at high heat fluxes,” International Journal of Heat and Mass Transfer, In Press, 2007
- Son, G. and Dhir V.K., “Three-dimensional simulation of saturated film boiling on a horizontal cylinder,” International Journal of Heat and Mass Transfer, In Press, 2007.
Son, G. and Dhir, V.K., “A Level set Method for Analysis of Film Boiling on an Immersed Solid Surface,” Numerical Heat Transfer, Part B: Fundamentals, Vol. 52, pp. 153-177, 2007.
- Wu, J., Dhir, V.K., and Qian, J., “Numerical Simulation of Subcooled Nucleate Boiling by Coupling Level Set Method with Moving Mesh Method,” Numerical Heat Transfer, Part B: Fundamentals, Vol. 51, pp. 535 – 563, 2007.
- Li, D. and Dhir, V.K., “Numerical Study of Single Bubble Dynamics during Flow Boiling,” Journal of Heat Transfer, Vol. 129, pp, 864-876, 2007.
- Li, D. and Dhir, V.K., “Numerical Study of a Single Bubble Sliding on a Downward Facing Heated Surface,” Journal of Heat Transfer, Vol. 129, pp. 877-883, 2007.
- Dhir, V.K., “Mechanistic Prediction of Nucleate Boiling Heat Transfer – Achievable or a Hopeless Task?,” Journal of Heat Transfer, Vol. 128, pp. 1-12, 2006.

• Conference Publications

- Wu, J. and Dhir, V.K., “Numerical Simulations of Dynamics and Heat Transfer Associated with a Single Bubble in the Presence of Noncondensables,” to be presented at IMECE 2007, Seattle, USA.
- Dhir, V.K., and Son, G., “Some Unexplored Aspects of Pool and Flow Boiling,” 6th International Conference on Multiphase Flow, Leipzig, Germany, July 9-13, 2007.
- Li, D., Dhir, V.K., “Single Bubble Dynamics During Flow Boiling on a Horizontal Surface at Different Gravity Levels,” Proceedings of Heat Transfer Conference, San Francisco, California, 2005.
- Li, D., Manickman, S., and Dhir, V.K., “A Numerical Study of a Single Bubble Sliding on a Downward Facing Heating Surface,” Proceedings of Heat Transfer Conference, San Francisco, California, 2005.
- Abarajith, H.S., Dhir, V.K., Son, G., “Numerical Simulation of Dynamics of Multiple Bubble Merger During Pool Boiling Under Reduced Gravity Conditions,” U.S. Japan Workshop on Multiphase Flows, Grazier, Japan, 2004.

- Li, D., Dhir, V.K., “A Numerical Study of Single Bubble Dynamics During Flow Boiling,” Proceedings of IMECE, 2004.